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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 09/895,910 | 06/29/2001 | Nagesh R. Basavanhally | 27-10-8-7-40 | 9485 |

7590 08/22/2003

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Rd.
Holmdel, NJ 07733-3030

EXAMINER

HYEON, HAE M

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 08/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/895,910 | BASAVANHALLY ET AL. |
| | Examiner Hae M Hyeon | Art Unit 2839 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 November 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20,23-29,31-35 and 37-42 is/are rejected.

7) Claim(s) 21,22,30,36,43 and 44 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 29 June 2001 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6. 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the cross-sectional views of the drawings do not show cross-sectional view of appropriate materials (see a chart in end of MPEP 608.02). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "1351" in Fig. 13. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the terminating end of at least one of the fibers being not coplanar with the terminating ends of the subset of the fibers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections - 37 CFR § 1.75(d)

4. The following is a quotation of an appropriate paragraph of 37 CFR 1.75:

(d) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a)).

5. Claim 32 is objected under 37 C.F.R. 1.75(d) because the present specification does not explain removing of the chuck. It is not clear how the ferrules are held together if the chuck is removed since the chuck is what holds the ferrules together.

Claim Objections

6. Claim 40 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 40, which is depended on claim 38, recites the same limitations as claim 1 with slight different phrases.

7. Claims 43 and 44 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 42. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 42-44 recite the same limitation, at least one additional ferrule having a hole without an optical fiber being used to align the apparatus. Since claims 42-44 depended on the same claim 38 and recite the same limitation with different phrase, they are essentially the duplicated claims to each other.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 18, 37 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: an alignment member.

Claim 37 recites the ferrule having at least one hole without a fiber inserted in the hole and claims 18 and 42 recite the same limitation recited in claim 37 plus the apparatus being aligned, but claims 18, 37 and 42 do not recite how the apparatus being aligned. A ferrule simply having a hole without an optical fiber cannot align the apparatus. An alignment member has to be placed in the hole of the ferrule and protruding out from the hole of the ferrule in order to align the apparatus according to the present specification.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 2, 4, 8-15, 19, 25, 26, 29, 31-34, and 38-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Ames et al (5,675,680).

Ames discloses an apparatus comprising a chuck 42, a plurality of precision ferrules 40 with a hole 50, and a plurality of optical fibers 48 bonded within the hole 50 of the ferrules 40.

The chuck 42 holds the ferrules in an array with hexagonal packing. The fibers are bonded within the holes using a potting material 46 such as an epoxy, which is glue. Also, potting material 46 maybe used to fix the ferrules 40 together, which is disposed between the chuck 42 and the ferrules 40. The chuck 42, itself is flexible, therefore, the chuck 42 includes at least one flexible member. Figure 1 of Ames shows a ferrule having an end with a conical tip and other end with conical entrance. Figure 23 of Ames shows the ferrules 40 being fixed in an angled to for a connector with an angled face.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 5-7, 16, 17, 20, 72 and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al in view of Gutierrez et al (6,595,698 B2).

Claim 3 is not reciting the structure of the claimed invention, but only reciting the intended used of the claimed invention. Claims 5-7 and 16 recite dimensional size of the claimed invention. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Claims 17 and 20 recite preferred materials for the ferrule and the non-rigid material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a

matter of obvious design choice. *In re Leshin*, 125 USPQ 416. For claim 28, it is a common knowledge for using holes for mounting.

Claim 27 recites that the fibers are cleaved fibers. While Ames does not disclose the fibers 48 being cleaved, Gutierrez discloses that top ends of the fibers 200A-200C are removed by cleaving or etching. Furthermore, Gutierrez teaches a various sizes for a hole 102 that receives a fiber 200 (see column 3, lines 40-54), a high precision ferrule made of ceramic and gluing a fiber in the ferrule (see column 1, lines 18-24).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the ferrule taught by Ames such that it would have the size and material as taught by Gutierrez because the size of the ferrule can be changed according to the designer's preference and ceramic is a commonly known material for making a ferrule. Lastly, cleaving a fiber is one of the most commonly known methods of cutting the fiber.

14. Claims 23, 24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al in view of McNerney et al (6,478,606 B1).

Claims 23, 24, and 35 recite a reinforcing sleeve coupled to the chuck. While Ames does not disclose a reinforcing sleeve, McNerney discloses a reinforcing sleeve 31 for securely bonding wires together. McNerney teaches making the reinforcing sleeve 31 integrally and separately with a main body 13.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the apparatus taught by Ames such that it would have a reinforcing sleeve as taught by McNerney to bond wires or optical fibers securely together.

Allowable Subject Matter

15. Claims 21, 22, 30 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
16. Claims 18, 37 and 42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,346,583 by Basavanhally, US Patent No. 5,394,493 by Ames, US Patent No. 5,550,942 by Sheem, US Patent No. 5,566,262 by Yamane et al., US Patent No. 6,078,714 by Cavanaugh, US Patent No. 6,328,482 B1 by Jian, US Patent No. 6,396,995 B1 by Stuelpnagel et al., and US Patent No. 6,587,618 B2 by Raguin et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose telephone number is 703-308-4802. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D Feild can be reached on 703-308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Art Unit: 2839

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Any response to this action may be mailed to:

**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Or Faxed to:

(703) 308-7722 or 308-7724

(Informal or draft communications should be clearly labeled "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

**Crystal Plaza 4, Fourth Floor (Receptionist)
2201 South Clark Place, Arlington, Virginia.**

Hae M Hyeon
Examiner
Art Unit 2839

hmh hmh
August 8, 2003

Hae Moon Hyeon